

Overview

PartMeister is a code generator that creates OpenDoc components from templates. In this release, templates are provided for creating parts derived from the ContainerPart sample part shipped with the toolkit.

Additional templates for the BaseNonContainer and Table parts are available from Club OpenDoc.

By using PartMeister to generate a new component, you may immediately compile the code, register the component and test it out.

Templates may be added and modified, allowing the tool to be extended.

Support

Updates for PartMeister will be available on the WorldWide Web at Club OpenDoc
<http://www.software.ibm.com/clubopendoc>

Support for this tool and accompanying documentation is available electronically from,

- Club OpenDoc (see URL above)
 - CI-Labs list server (OpenDoc-Interest@CILabs.ORG)
 - Internet mail to opendoc@austin.ibm.com
 - the OPENDOC CFORUM on TalkLink
 - for IBM staff, OPENDOC FORUM on IBMPC
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Configuration

Settings (from the 'Settings' dialog) must be set before generating any components with PartMeister.

The 'Copyright' page specifies the information that will be contained in the header comments for source files.

The 'Directory' page requires four directories to be set,

- Runtime - where the OpenDoc runtime executables/DLLs are located, used in the make file to specify where the output component should be.
 - Toolkit - the base directory for the OS/2 toolkit
 - Public files - where to locate and store files that are common to more than one component
 - Output - directory to use as the base for where components will be generated. This directory must exist, and is recommended to be a separate directory under the root directory (ie. C:\ODPARTS).
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Creating a new component

Select a template on the Template page, then fill in the Part page.

Fill in the name of your new class, and a short name (a short name is 8 characters or less and must contain characters that are valid for a filename - it is used as the name of the directory that the files are generated into and for the filenames of the generated files).

Category refers to the broad definition of the data type for the part. A list of currently defined categories is provided, or you may fill in a new category.

Kind is the specific data type (for example, a word-processor specific text format) of the part.

The Symbols page provides a page for templates with requirements for additional symbols for the code generator. Each symbol may be selected from the list provided, and its individual value updated.

When the fields have been filled in to your satisfaction, select 'Generate' from the 'Part' menu to generate the part files. You may then use NMAKE with the generated make file to compile and link the part.

Templates

The foundation of the code generation capabilities of PartMeister are templates. PartMeister is extended through the addition of new templates, which may be written by individual developers or received from others.

Adding a template to PartMeister

If you create or receive a template, you may add it to the available templates by copying the .TPL file and the associated code generation files to the PartMeister directory. PartMeister scans the directory for template definition files when loaded.

Creating a template

Templates are used to extend the function of PartMeister by providing new models for code generation. Often templates will implement derived components, and that a superclass may have more than one associated template.

Steps

To create a template to generate a derived class,

- create an OpenDoc part to be subclassed
 - implement a subclass of the part
 - replace the appropriate values with replaceable parameters
 - name the template files appropriately
 - create a template definition file (.TPL)
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Replaceable parameters and functions

Replaceable parameters take the form \$parameter\$. Functions that operate on parameters take the form \$parameter:function\$.

Available replaceable parameters are,

- partname - name of the IDL interface (class name)
- filename - file name for the new components files
- parentname - IDL interface name of parent

- parentfilename - file name of parent files
- author - name of component author
- company - company holding copyright
- years - year, or years, for copyright notice
- category - OpenDoc part category
- kind - OpenDoc part kind
- displayname - display name
- kinddisplayname - kind display name
- categorydisplayname - category display name
- runtimepath - OpenDoc runtime directory
- toolkitpath - Base directory for toolkit
- publicpath - public files directory
- outputpath - target path for generation
- toolname - Name of tool generating files
- toolversion - Version number of tool generating files

Available functions are,

- toupper - change parameter to upper case
- tolower - change parameter to lower case

The following are two examples of function usage,

- \$filename:toupper\$
- \$partname:tolower\$

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